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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,501	01/04/2002	Theodore F. Emerson	COMP:0221	6279

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Intellectual Property Administration
Legal Department M/S 35
P.O. Box 272400
Ft. Collins, CO   80527-2400

EXAMINER
PATEL, DHAIRYA A

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communication filed on 12/12/2005.

2. This amendment has been entered and considered.

3. Dependent claim 10 has been cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2,4,8,9,11-14,17-20 are rejected under 35 U.S.C. 102(b) as being

anticipated by Krontz et al. U.S. Patent # 5,790,895 (hereinafter Krontz).

As per claim 1, Krontz teaches a remote server management controller,

comprising:

-an external communication interface (Fig. 1A element 149) adapted to

communicate according to a first communication protocol and to receive from a remote

user (column 12 lines 17-36, lines 54-64);

The reference teaches the modem (external communication interface) receives

the incoming call and examines the first few characters from the incoming call (receiving

data) from the remote user using certain communication protocols (first communication

protocol);

-an input/output processor (IOP) adapted to:

-receive data from external communication interface (column 10 lines 46-64); and

The reference teaches the input/output processor (IOP) receives data from the modem (external communication interface).

-transmit data corresponding to the data received from the external communication interface to an operating system (OS) of a managed server (column 10 lines 55-67)(column 11 lines 1-9, lines 26-45)(column 12 lines 54-64); and

The reference teaches sending the resource data to the operating system of the server and the Virtual communication port of the device intercepts the data. The data is sent to the remote computer (remote user) via the modem (external communication port) to the operating system.

-a virtual communication device (VCD) (Fig. 2 element 200) interface adapted to (column 11 lines 40-44):

-intercept data received from the OS, the data being in a format that is not compatible with first communication protocol (column 10 lines 55-67)(column 11 lines 1-9, lines 26-45)(column 12 lines 17-36) (column 12 lines 54-67), the data not being addressed to the external communication interface (column 12 lines 54-67);

The reference teaches intercepting the data, which is not in the format of certain protocols (first communication protocols), it gobbles or disposes the data therefore it is not addressed to external communication interface.

-format the data for transmission according to the first communication protocol (column 12 lines 54-63); and

The reference teaches remote computer senses that connection in regards to data has not been established and retransmits and redirects it again through the

protocols (format the data according to first communication protocol) therefore gobbling

of data changed therefore the data has been transmitted.

-to redirect the formatted data to the external communication interface instead of

a specific communication interface to which the data was addressed (column 12 lines

54-67).

The reference teaches retransmitting the redirected formatted data to the

operating system from the remote computer through a modem (external communication

interface).

As per claim 2, Krontz teaches the remote server management controller of claim

1, wherein the specific communication interface is a UART interface of the managed

server (column 10 lines 44-64).

As per claim 4, Krontz teaches the remote server management controller of claim

1, wherein data received from the user over the external communication interface is

transmitted to the OS of the managed server via a UART interface. (Column 10 lines

47-64)

As per claim 8, Krontz teaches the remote server management controller of claim

1, wherein the external communication interface is an Ethernet interface. (column 9

lines 49-56) (column 10 lines 44-47) (Fig. 1a element 149)(Column 11 lines 52-59)

The reference teaches communication takes place using a modem, which also

works, as an Ethernet interface.

As per claim 9, Krontz teaches a remote server management controller,

comprising:

-an input/output processor (IOP) adapted to monitor interrupt data transmitted

from a super I/O (SIO) to a southbridge (column 9 lines 25-34), to alter the interrupt data

transmitted from the SIO based on input received from an external user via an external

communication interface that is adapted to communicate according to first protocol

(column 12 lines 17-36, lines 54-64) and to transmit the altered interrupt data to a

managed server (column 9 lines 25-56); and

-a virtual communication device (VCD) that is adapted to:

-intercept responsive data intended to be transmitted to the SIO in response to

the altered interrupt data (column 10 lines 55-67)(column 11 lines 1-9, lines 26-

45)(column 12 lines 17-36), the responsive data being in a format that is not compatible

with the first communication protocol (column 12 lines 54-67); and

-prevent the responsive data from reaching the SIO (column 10 lines 26-43);

The reference teaches the virtual communication port (VCD) to intercept the

accesses (data) and prevents it from reaching the SIO.

-format the responsive data for transmission according to the first communication

protocol (column 12 lines 54-63); and

The reference teaches remote computer senses that connection in regards to

data has not been established and retransmits and redirects it again through the

protocols (format the data according to first communication protocol) therefore gobbling

of data changed therefore the data has been transmitted.

-redirect the formatted data to the external communication interface instead of

specific communication interface to which the responsive data was addressed (column

12 lines 54-67).

The reference teaches retransmitting the redirected formatted data to the

operating system from the remote computer through a modem (external communication

interface).

As per claim 11, Krontz teaches the remote server management controller of

claim 9 wherein the input received from the external user is adapted to emulate an

interrupt generated by a device in the managed server (column 10 lines 24-46).

As per claim 12, Krontz teaches the remote server management controller of

claim 9 wherein the external communication interface is an Ethernet interface (column 9

lines 49-56) (column 10 lines 44-47) (Fig. 1a element 149)(Column 11 lines 52-59)

The reference teaches communication takes place using a modem which also

works as an Ethernet interface.

As per claim 13, Krontz teaches a method of remotely retrieving data from an

operating system (OS), the method comprising the acts of:

-receiving a request for OS information from a remote user via an external

communication interface that is adapted to communicate according to a first

communication protocol(column 12 lines 17-36, lines 54-64);

The reference teaches the modem (external communication interface) receives

the incoming call and examines the first few characters from the incoming call (receiving

data) from the remote user using certain communication protocols (first communication

protocol);

-transmitting the request for OS information to the OS via a virtual

communication device (VCD)(column 10 lines 55-67)(column 11 lines 1-9, lines 26-

45)(column 12 lines 54-64); and

The reference teaches sending the resource data to the operating system of the

server and the Virtual communication port of the device intercepts the data. The data is

sent to the remote computer (remote user) via the modem (external communication

port) to the operating system.

-receiving via the VCD interface data responsive to the act of transmitting the

request to the OS, the responsive data being in format that is not compatible with the

first communication protocol, the responsive data not being addressed to the external

communication interface (column 10 lines 55-67)(column 11 lines 1-9, lines 26-

45)(column 12 lines 17-36)(column 12 lines 54-67);

The reference teaches receiving the data, which is not in the format of certain

protocols (first communication protocols), it gobbles or disposes the data therefore it is

not addressed to external communication interface.

-formatting the responsive data for transmission according to the first

communication protocol(column 12 lines 54-63); and

The reference teaches remote computer senses that connection in regards to

data has not been established and retransmits and redirects it again through the

protocols (format the data according to first communication protocol) therefore gobbling

of data changed therefore the data has been transmitted.

-redirecting the formatted data to the external communication interface instead of

a specific communication interface to which the data was addressed (column 12 lines

54-67).

The reference teaches retransmitting the redirected formatted data to the

operating system from the remote computer through a modem (external communication

interface).

As per claim 14, Krontz teaches the method of claim 13 wherein the specific

communication interface is a UART interface (column 10 lines 44-64).

As per claim 17, Krontz teaches the method of claim 13 further comprising the

act of enabling an Ethernet interface to receive the request for OS information (column

10 lines 44-64).

As per claim 18, Krontz teaches the method of claim 13 further comprising the

act of initiating an out-of-band management communication session (column 11 lines

25-45)(column 10 lines 46-64).

As per claim 19, Krontz teaches the method of claim 13 further comprising the

act of enabling a VCD to transmit the request for OS information to the OS (column 11

lines 35-51)(column 12 lines 57-60).

As per claim 20, Krontz teaches the method of claim 13 wherein the recited acts are

performed in the recited order (column 10 lines 44-64)(column 11 lines 25-51)(column

12 lines 57-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 3,5,15,21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Krontz et al. U.S. Patent # 5,790,895 (hereinafter Krontz) in view of Britt JR. et al.

U.S. Patent Publication # 2002/0032785 (hereinafter Britt).

As per claim 3, Krontz teaches the remote server management controller of claim

1, but fails to teach wherein the specific communication interface is a USB host

controller of the managed server. Britt teaches the specific communication interface is

a USB host controller of the manager server. (Paragraph 28). It would have been

obvious to one of ordinary skill in the art at the time of applicant's invention to implement

Krontz's invention in Britt's invention to come up with specific communication interface

as USB host controller. The motivation for doing so would have been because USB

interface supports variety of peripheral devices using the USB host controller.

As per claim 5, Krontz teaches the remote server management controller of claim

1, wherein data received from the user over the external communication interface is

transmitted to the OS of the managed server but fails to teach via a USB interface. Britt

teaches using USB interface to transmit data to the server (Paragraph 28). It would

have been obvious to one of ordinary skill in the art at the time of applicant's invention

to implement Krontz's invention in Britt's invention to come up with using USB interface to transmit data to the server. The motivation for doing so would have been because USB interface supports variety of peripheral devices using the USB host controller.

As per claim 15, Krontz teaches the method of claim 13 but fails to teach wherein the specific communication interface is a USB interface. Britt teaches the specific communication interface is a USB interface (Paragraph 28). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Krontz's invention in Britt's invention to come up with using USB interface. The motivation for doing so would have been because USB interface supports variety of peripheral devices using the USB host controller.

As per claim 21, Krontz teaches the remote server management controller of claim 1, wherein the format that is not compatible with the first communication protocol but fails to teach comprises a USB interface. Britt teaches format comprises a USB interface (Paragraph 28). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Krontz's invention in Britt's invention to come up with using USB interface. The motivation for doing so would have been because USB interface supports variety of peripheral devices using the USB host controller and also one does not have to reconfigure the USB interface when using from one operating system to another.

As per claim 22, Krontz teaches the remote server management controller of claim 9, wherein the format that is not compatible with the first communication protocol but fails to teach comprises a USB interface. Britt teaches standard communication

interface comprises a USB interface (Paragraph 28). It would have been obvious to one

of ordinary skill in the art at the time of applicant's invention to implement Krontz's

invention in Britt's invention to come up with using USB interface. The motivation for

doing so would have been because USB interface supports variety of peripheral devices

using the USB host controller and also one does not have to reconfigure the USB

interface when using from one operating system to another.

As per claim 23, Krontz teaches the method of claim 13, wherein the format that

is not compatible with the first communication protocol but fails to teach comprises a

USB interface. Britt teaches standard communication interface comprises a USB

interface (Paragraph 28). It would have been obvious to one of ordinary skill in the art

at the time of applicant's invention to implement Krontz's invention in Britt's invention to

come up with using USB interface. The motivation for doing so would have been

because USB interface supports variety of peripheral devices using the USB host

controller and also one does not have to reconfigure the USB interface when using from

one operating system to another.

6. Claims 6,7,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Krontz et al. U.S. Patent # 5,790,895 (hereinafter Krontz) in view of Ito et al. U.S. Patent

6,671,343 (hereinafter Ito)

As per claim 6, Krontz teaches the remote server management controller of claim

1, but fails to teach the specific communication interface is a 1394 interface of the

managed server. Ito teaches the specific communication interface is 1394 interface

(column 3 lines 51-67)(column 4 lines 1-22). It would have been obvious to one of

ordinary skill in the art at the time of applicant's invention to implement Krontz's invention in Ito's invention to come up specific communication interface as 1394 interface. The motivation for doing so would have been to because it provides faster data transmission compare to other communication interfaces.

As per claim 7, Krontz teaches the remote server management controller of claim 1, wherein data received from the user over the external communication interface is transmitted to the OS of the managed server but fails to teach via a 1394 interface. Ito teaches the transmitting data to the server using 1394 interface (column 3 lines 51-67)(column 4 lines 1-22). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Krontz's invention in Ito's invention to come up with using 1394 interface to transmit data to the server. The motivation for doing so would have been because it provides faster data transmission compare to other communication interfaces.

As per claim 16, Krontz teaches the method of claim 13 but fails to teach wherein the specific communication interface is a 1394 interface. Ito teaches the specific communication interface is 1394 interface (column 3 lines 51-67)(column 4 lines 1-22). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Krontz's invention in Ito's invention to come up specific communication interface as 1394 interface. The motivation for doing so would have been to because it provides faster data transmission compare to other communication interfaces.

Remarks

7. Applicant's remarks were fully considered but were not deemed persuasive by the Examiner.

8. As per remarks applicant stated the following:

A). As per claim 1, applicant stated Krontz fails to teach "an external communication interface adapted to communicate according to a first communication protocol" and "a virtual communication device (VCD) interface adapted to intercept data received from the OS, the data being in a format that is not compatible with first communication protocol, the data not being addressed to the external communication interface, to format the data for transmission according to the first communication protocol, and to redirect the formatted data to the external communication interface instead of a specific communication interface to which the data was addressed."

B). Applicant stated Krontz does not disclose a system in which a virtual communication device intercepts data addressed to a specific device, formats the data for transmission via an external communication interface, and redirects that data to the external communication interface.

As per remark A, Examiner respectfully disagrees with the applicant because in column 12 lines 17-36, lines 54-64, Krontz teaches the modem (external communication interface) receives the incoming call (communicate) and examines the first few characters from the incoming call (receiving data) from the remote user using certain communication protocols (first communication protocol).

In column 10 lines 55-67, column 11 lines 1-9, lines 26-45, column 12 lines 17-36 and column 12 lines 54-67, Krontz further teaches VCD (Fig. 2 element 200)(column 11 lines 40-44) intercepting the data, which is not in the format of certain protocols (first communication protocols), it gobbles or disposes the data therefore it is not addressed to external communication interface.

In column 12 lines 54-63, Krontz further teaches a remote computer senses that connection in regards to data has not been established and retransmits and redirects it again through the protocols (format the data according to first communication protocol) therefore gobbling of data changed therefore the data has been transmitted.

In column 12 lines 54-67, Krontz further teaches retransmitting the redirected formatted data to the operating system from the remote computer through a modem (external communication interface).

As per remark B, Examiner respectfully disagrees with the applicant because in column 10 lines 55-67, column 11 lines 1-9, lines 26-45, column 12 lines 17-36 and column 12 lines 54-67, Krontz further teaches VCD (Fig. 2 element 200)(column 11 lines 40-44) intercepting the data which is addressed to destination port, which is not in the format of certain protocols (first communication protocols), it gobbles or disposes the data therefore it is not addressed to external communication interface.

In column 12 lines 54-63, Krontz further teaches a remote computer senses that connection in regards to data has not been established and retransmits and redirects it again through the protocols (format the data according to first communication protocol) therefore gobbling of data changed therefore the data has been transmitted.

In column 12 lines 54-67, Krontz further teaches retransmitting the redirected

formatted data to the operating system from the remote computer through a modem

(external communication interface).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

A). "Transparent keyboard hot plug" by Emerson et al. U.S. Patent # 5,898,861.

10. A shortened statutory period for response to this action is set to expire **3**

(three) months and 0 (zero) days from the mail date of this letter. Failure to respond

within the period for response will result in **ABANDONMENT** of the applicant (see 35

U.S.C 133, M.P.E.P 710.02, 710.02(b)).

11.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-

5809. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DAP

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER